## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Bay Area Branch



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

# WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-028252

Address: 333 Burma Road **Date Inspected:** 22-Aug-2012

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1930 Prime Contractor: American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

**CWI Name:** See below. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A

**Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG

## **Summary of Items Observed:**

Quality Assurance Inspector (QA) Fritz Belford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

## OBG 12W

This QA observed the following welders working in OBG 12W at various locations:

#### Authorized welder Chris Bruce #8901:

Welder Chris Bruce was observed welding on welds 12W PP117 W2.1-BW4 (3G, CJP) and 12W PP116.5 W2. 1-BW4 (3G, CJP) utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D15-1040A and ABF-WPS-D15-1030. Welding parameters as per Welding Procedure Specification's (WPS) utilized appears to be in order.

#### Authorized welder Rick Clayborn #2773:

Welder Rick Clayborn was observed performing weld repairs on Ultrasonic Testing Shear Wave rejects (UTSW) on weld 12W PP111.1-B1 (3G, CJP) utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D1.5-1004-Repair. Welder was observed following pre heat protocols with a torch. Welder was observed Pre-heating to over 225 degrees Fahrenheit for Carbon Arc Gouging (CAG), over 325 degrees Fahrenheit for welding and over 450 degrees Fahrenheit for 1 hour of Post Weld Heat Treat (PWHT). All repairs to weld were approved as per RWR 201208-049.

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#### Authorized welder Richard Garcia #5892:

Welder Richard Garcia was observed performing weld repairs on Ultrasonic Testing Shear Wave rejects (UTSW) on weld 12W 13W-B1 (3G, CJP) utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D1.5-1004-Repair. Welder was observed following pre heat protocols with a torch. Welder was observed Pre-heating to over 225 degrees Fahrenheit for Carbon Arc Gouging (CAG), over 325 degrees Fahrenheit for welding and over 450 degrees Fahrenheit for 1 hour of Post Weld Heat Treat (PWHT). Request for Weld Repair (RWR) is pending for this weld. Excavation length and depth of repair noted this day does not exceed limits as per AWS D1.5 2002, paragraph 12.17.2. Welder was relocated after completion of indication repair at Y location 1900 from the exterior side.

#### Authorized welder Mike Jimenez #4671:

Welder Mike Jimenez was observed performing weld repairs on Ultrasonic Testing Shear Wave rejects (UTSW) on weld 12W PP111.1-LS1 (3G, CJP), 12W PP111.1-LS2 (3G, CJP) and 12W PP111.1-LS3 (3G, CJP), utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D1.5-1002-Repair. Welder was observed following proper pre heat protocols for Carbon Arc Gouging (CAG). RWR not required for this weld repair.

This QA randomly observed OBG 12W QC Chris Concha, checking fit up of various welds, and checking WPS compliance of welders throughout the day and performing Magnetic Particle Testing (MT) on the back gouges as they become available for testing.

## Magnetic Particle Testing

This QA performed Magnetic Particle Testing (MT) on the following welds:

12W PP116.5 W2.1-BW4:

- 910 mm Back Gouges. (MT Accept.)

12W PP11.1-B1, External Side Indication Repairs at:

- 1) Y locations 25 (130 x 35 x 18 Deep). MT Accept.
- 3) Y locations 220 (170 x 30 x 12 Deep). MT Accept.
- 4) Y locations 345 (175 x 25 x 16 Deep). MT Accept.
- 6) Y locations 610 (150 x 25 x 18Deep). MT Not Accept. To be repaired internally.
- 8) Y locations 840 (130 x 35 x 18Deep). MT Accept.

12W 13W-B1, External Side Indication Repair at:

- 1) Y locations 1900 (270 x 50 x 12 Deep). MT Accept.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

Conversations relevant to work performed on this date.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy - (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Belford,Fritz	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer